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FIRST HUNGARIAN CONFERENCE ON PHARMACOTHERAPY

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FIRST HUNGARIAN CONFERENCE ON PHARMACOTHERAPY

[Following is the translation of an article by Boris Dumbovics in Magyar Tudomany (Hungarian Science), No 8, Budapest 1960, pages 499-500]

The Conference on Pharmacotherapy was organized by the Hungarian Academy of Sciences 26-30 April in Budapest. Eighty foreign experts and numerous Hungarian specialists participated. About half of the foreign participants were from capitalistic countries and the rest from socialist countries. A considerable number of experts represented large Western pharmaceutical companies, naturally interested in the newest results of Hungarian pharmacological research.

It was in every respect justified to bring together experts of various professions interested in pharmacotherapy -- pharmacochemists, pharmacologists, clinical specialists -- in one conference. In recent years such overwhelming numbers of reports have been published on new drugs that it became well-nigh impossible even for the expert to keep track of them. The work of the chemist creating the compound, the pharmacologist conducting experiments on animals to try out the drug, and the clinician using the drug on sick people is so closely related that a meeting of these scientists at a conference table may contribute significantly to the solution of problems.

The opening speech was offered by Minister of Health Frigyes Doleschall. Next, the history of pharmacological research in Hungary was outlined by Bela Issekutz, member of the Academy, the nestor of Hungarian pharmacologists; as discoverer of several drugs he has actively contributed to this history over the past 50 years.

The agenda of the conference reflected the great problems and achievements of pharmacotherapy at present of primary interest.

Several lectures dealt with current problems of psychopharmacology, a new branch of science which gives reason for new hope in cases of mental disease heretofore considered incurable. It was good news that both lectures in the field reported the discovery of new Hungarian drugs. Jozsef Borsy's report was on a mild tranquilizer, Trioxazin, produced by Laszlo Varga and his colleagues. A strong tranquilizer called Manil (piperidino-methyl-tetralon) was produced by Karoly Nador and reported by Jozsef Knoll and colleagues. Both drugs will soon be available on the market. S. V. Anyichkov (Leningrad) discussed the comparative effects of Cholinerg depressants on the central nervous system and that of a drug called Antifein (methylimidazol-

dimethylacide) on the cerebral cortex. The latter has a tranquilizing effect comparable to that of reserpine, although its biochemical action is different from that of reserpine.

E. Frommel (Geneva) explained very interestingly the various clinical reactions obtained from two, partly comparable drugs, Tofranil and Chlorpromazine, by demonstrating certain differences in their pharmacodynamic action. O. Nieschultz (Hamburg) found, on examining a large number of new phenothiazine derivatives that there are compounds among them which counteract the effects — such as lowering of blood pressure, sedation, inhibition of vegetative process — of certain phenothiazines formerly used.

Several speakers lectured on the circulatory and heart diseases. The function of the healthy and decompensated heart was examined by Pal Gomori and his colleagues. Applying quantitative methods of comparison they found that the Hungarian products (Digitoxin, Digoxin, Strophantozid) are entirely equival to comparable foreign products as far as effectiveness is concerned. P. E. Lukomsky (Moscow) achieved good results with Linetol (a mixture of the ethyl esters of linseed oil fatty acids) in patients with coronary arterio-sclerosis. The cholesterol level of the blood dropped, the patients' general condition improved, pains around the heart abated. Imre Back offered an explanation for the decrease of blood pressure in hypertonia with the use of dihydrochlorthiazide; he assumes that the strong sodium-eliminating action of the drug is responsible. In his opinion, in addition to the high sodium level of the organism, the quantitative relationship of the same to the potassium content is also an important factor in maintaining hypertonia. Z. Ashkenaz (Warsaw) and his colleagues conducted an objective study to determine the effects Nitropenton, a Hungarian drug for prolonged coronary dilation, has on the heart, the large blood vessels, and on the periferal circulation of the limbs; the findings were obtained with the help of ECGS and plethysmograms. Zoltan Szabo and his coworkers reported on the pharmacological and clinical results obtained with a vegetal derivative, Devincan, an anti-hypertension drug. V. V. Zakousov (Moscow) proved that Chloracizine, a phenothiazine derivative (diethylamino-propionilchlorphenothiazine), having a structure similar to that of Chlorpromazine only of the acidic amide type, causes a significant acceleration of circulation in the coronary artery without affecting the general blood pressure level.

Karoly Nador spoke about his work with tropane structure compounds of antiacetylcholine action. He arrived at valuable results concerning the interaction of structure, spatial structure and pharmacological action of these compounds. The practical results of this research, Gastropin, a drug for gastric ulcer, is already known abroad.

Karoly Nador produced two other remarkable drugs belonging in the amino ketone compound-group. The favorable clinical results of Spiraktin (n-piperidinomethyl-cyclohexanon), a drug used for stimulating the respiratory center, was described by G. Litarczek and

coworkers (Bucharest) and Pal Rubanyi and collaborators. Yet another amino ketone compund, named Mydeton, (piperidino-methyl-p-tolyl-propanon) was reported by Tibor Lehoczky and his colleagues. This compund acts selectively on the formatio reticularis of the brain, yielding highly favorable results in the treatment of hypertonic muscle contractures of extrapyramidal aetiology. M. A. Krishova (Moscow) reported similar results with Mydeton.

The progress and major achievements in antibiotic research in Hungary were outlined by Tibor Valyi Nagy. Jozsef Uri described Flavofungin, the new Hungarian fungicide antibiotic.

Thousands of researchers all over the world are involved in chemotheraputic investigations for the cure of oncological diseases. Unfortunately we are still far from the solution; yet certain results in the chemotherapy of hematoblastoses, a malignant condition of the hematopoietic system, carry some promise. Several lectures dealt with results obtained by our investigators in this field.

L. Savnik (Ljubljana) achieved best results on hematoblastosis patients with the Hungarian drug Degranol, among a variety of drugs with which he experimented. Laszlo Vargha and coworkers reported on their efforts of several years with cystostatic sugar derivatives, resulting in the discovery of Degranol. They demonstrated that the cystostatic action depends not only on the alkylizing group, but is also decisively influenced by the configuration of the sugar constituent.

Jozsef Balo and colleagues discussed, from the viewpoint of the pathologist, their experiments with sugar derivatives on animals as well as on human malignant growth and leukoses. Laszlo Nemeth reported on his animal experiments with 1, 6-dimesil-B-mannit, produced by Laszlo Vargha; clinical results and biochemical findings were discussed by Camillo Sellei and collaborators, giving detailed explanation of the action mechanism. A. Ravina and coworkers (Paris) reported on experiences they gleaned with antibiotics, especially Actinomycin C and D, used for tumor therapy in clinical conditions.

Among the lectures dealing with chemotherapy, the reports of Endre Jeney and Tibor Zsolnay on bacterio- and fungicide compounds, and of Gyorgy Ivanovics and coworkers on new TB chemotherapeutical methods deserve mention.

Among the lectures of miscellaneous import, the report of Ilona Banga on the chemistry and biological effect of elastase, and Daniel Bagdy and collaborators on the industrial production of elastase for therapeutic purposes were outstanding.

L. Ther (Frankfurt/M) discussed issues of animal experimentation, such as the validity of exptrapolation to human beings of results obtained on animals, and methodological problems involved in trial applications of drugs under clinical conditions. M. Protiva and coworkers (Prague) produced reserpine analogues by partial and complete synthesis. Gyorgy Wiz and his colleagues reported on investigations into sterine oxidation with Fusarium caucasicum. This method of synthesis is of extreme importance in manufacturing steroid hormones.

W. Creutzfeldt and collaborators (Freiburg), Antal Kaldor and colleagues, and Laszlo Tardos and coworkers discussed the effects of synthetic anti-hypertensive materials. The latter group reported on a Hungarian product for decreasing high blood pressure.

In this brief review there is no space to mention all the valuable contributions. Yet we feel that this incomplete report reflects the unanimous opinion of the participants, namely that the conference was a success and fulfilled expectations. We might offer in the way of criticism that it would be practicable in the future to limit the scope of such conferences to specific topics, for as it was, the lectures embraced too broad and heterogeneous a field. In the future it seems also desirable to give wider domestic publicity to the conference in order to obtain greater participation from our own specialists.

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